

Newton's First & Second Laws Notes Review

Name: _____ Date: _____

Table: _____ Section: _____

- 1) What does Newton's first law of motion state? Give an example.
- 2) Why is Newton's first law called the Law of Inertia?
- 3) State Newton's second law of motion. Give an example.
- 4) How could you keep an object's acceleration the same if the force acting on the object were doubled?
- 5) Using what you know about Newton's second law, explain why a car with a large mass might use more fuel than a car with a smaller mass. Assume both cars drive the same distance.

Performance Task: What Changes Motion?

Procedure:

Step 1: Gather 4 pennies and a toy car.

Step 2: Place the toy car on one end of the table. Stack the pennies on the toy car.

Step 3: Place a heavy book or binder on the table away from the car.

Step 4: Predict what will happen to the car and the pennies if you roll the car into the book.

Step 5: Test your prediction

Analysis:

1. What happened to the car when it hit the book?
2. What happened to the pennies?
3. What might be the reason for any difference between the motions of the car and the pennies?
4. Which of Newton's laws is demonstrated with this activity?